

AMENDMENTS TO THE CLAIMS

- Q4
1. (Currently amended) A method of retraining a trainable data classifier, the method comprising the steps of:
providing a first item of training data;
comparing the first item of training data with a second item of training data already used to train the data classifier to provide; ~~calculating~~ a measure of conflict between the first and second items of training data; and,
using the first item of training data to retrain the data classifier responsive to the measure of conflict.
 2. (Currently amended) A method according to claim 1, wherein ~~the step of using~~ the first item of training data is responsive to a predetermined conflict threshold value.
 3. (Currently amended) A method according to claim 2, wherein the threshold value is non-zero.
 4. (Currently amended) A method according to claim 1, wherein the measure of conflict comprises a geometric difference between the first and second items of training data.
 5. (Currently amended) A method according to claim 4, wherein the geometric difference comprises a Euclidean distance.
 6. (Currently amended) A method according to claim 1, wherein the measure of conflict comprises an association coefficient of the first and second items of training data.
 7. (Currently amended) A method according to claim 6, wherein the association coefficient is a Jaccard's coefficient.
 8. (Currently amended) A method according to claim 7, wherein the measure of conflict is derived from both a Euclidean distance between and a Jaccard's coefficient of the first and second items of training data.
 9. (Currently amended) A method according to claim 8, wherein the measure of conflict is derived from a Euclidean distance and a Jaccard's coefficient composed in an exponential relationship with respect to each other.

10. (Currently amended) A method according to claim 8, wherein the measure of conflict is derived from a function of a Euclidean distance multiplied by an exponent of a function of the Jaccard's coefficient.

11. (Currently amended) A method according to claim 1, wherein the data classifier comprises a neural network.

12. (Currently amended) A method according to claim 1, wherein the training data comprises telecommunications network data.

13. (Currently amended) A method according to claim 1, wherein the training data comprises telecommunications call detail record data.

14. (Currently amended) A method of training a trainable data classifier comprising the steps of:

providing a plurality of items of training data;

comparing a first of the items of training data with a second of the items of training data already used to train the data classifier; calculating to provide a measure of conflict between the first and second items of training data; and

using one of the first and second items of training data to retrain the data classifier responsive to the measure of conflict.

15. (Currently amended) An apparatus for retraining a trainable data classifier, and comprising:

an input port for receiving a first item of training data;

a comparator arranged to compare the first item of training data with a second item of training data already used to train the data classifier; ~~a calculator for calculating~~ and to calculate a measure of conflict between the first and second items of training data; and

an output port arranged to output the first item of training data to the data classifier responsive to the measure of conflict.

16. (Original) A anomaly detection system comprising apparatus according to claim 15.

17. (Original) A telecommunications data anomaly detection system comprising apparatus according to claim 15.

18. (Original) A telecommunications fraud detection system comprising apparatus according to claim 15.

19. (Original) An account fraud detection system comprising apparatus according to claim 15.

20. (Currently amended) An apparatus for retraining a trainable data classifier comprising:
an input port for receiving a plurality of items of training data;
a comparator arranged to compare a first of the items of training data with a second of the items of training data already used to train the data classifier; ~~a calculator for calculating~~ and to calculate a measure of conflict between the first and second items of training data; and,
an output port arranged to output the first item of training data to the data classifier responsive to the measure of conflict.

21. (Currently amended) A program for a computer on a machine readable medium arranged to ~~perform the steps of:~~

~~receive~~receiving a first item of training data;

~~compare~~comparing the first item of training data with a second item of training data already used to train the data classifier; ~~calculating to provide~~ a measure of conflict between the first and second items of training data; and,

~~use~~using the first item of training data to retrain the data classifier responsive to the measure of conflict.

22. (Currently amended) A program for a computer on a machine readable medium arranged to ~~perform the steps of:~~

~~receive~~receiving a plurality of items of training data;

~~compare~~comparing a first of the items of training data with a second of the items of training data; ~~calculating to provide~~ a measure of conflict between the first and second items of training data; and,

useing one of the first and second items of training data to retrain the data classifier responsive to the measure of conflict.

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